

In the Claims

1. (Currently amended) A method for treating or preventing a neurodegenerative Parkinson's disease in a mammal in need of such treatment comprising administering a lentiviral vector to a target cell in the brain nervous system of the mammal, said lentiviral vector comprising a nucleic acid sequence comprising a sequence encoding human glial cell line derived neurotrophic factor (GDNF) a growth factor operably linked to a promoter, wherein GDNF the growth factor is expressed in the target cell thereby treating or preventing said Parkinson's neurodegenerative disease, such that nigrostriatal degeneration is reduced.

2-10. (Cancelled)

11. (Currently amended) The method of claim 1, any one of claims 1-10 wherein the lentiviral vector is an EIAV.

12. (Currently amended) The method of claim 1, any one of claims 1-10 wherein the lentiviral vector is an HIV.

13. (Currently amended) The method of claim 1, any one of claims 1-10 wherein the lentiviral vector is an SIV.

14. (Currently amended) The method of claim 1, any one of claims 1-10 wherein the lentiviral vector is an FIV.

16. (Currently amended) The method of claim 1, any one of claims 1-10 wherein the lentiviral vector is a nonprimate lentiviral vector.

17-20. (Cancelled)

21. (Currently amended) The method of claim 1, any one of claims 1-10 wherein the mammal is a primate.

22. (Original) The method of claim 21 wherein the primate is a human.

23. (Currently amended) The method of claim 1, any one of claims 1-10 wherein the administering is intracranially.

24. (Original) The method of claim 23 wherein the administering intracranially is to the striatum.

25. (Original) The method of claim 23 wherein the administering intracranially is to the substantia nigra.

26. (Currently amended) The method of claim 1, any one of claims 1-10 wherein the administering is by retrograde transport.

27. (Currently amended) The method of claim 1, any one of claims 1-10 wherein there is growth factor expression for a duration of up to 8 months.

28. (Currently amended) The method of claim 1, any one of claims 5, 6, 7 or 8 wherein the treating of Parkinson's disease or of symptoms of Parkinson's disease is defined as a reversal of motor deficits due to said Parkinson's disease are reversed.

29. (Cancelled)

30. (Currently amended) The method of claim 1, any one of claims 9-10 wherein the method induces is a method for preventing nigrostriatal degeneration and/or inducing nigrostriatal regeneration.